

United States Patent [19]

Hill

[11] Patent Number: 4,917,120

[45] Date of Patent: Apr. 17, 1990

[54] NICOTINE IMPACT MODIFICATION

[75] Inventor: Ira D. Hill, Locust, N.J.

[73] Assignee: Advanced Tobacco Products, Inc.,
San Antonio, Tex.

[21] Appl. No.: 308,936

[22] Filed: Feb. 7, 1989

Related U.S. Application Data

[63] Continuation of Ser. No. 866,073, May 21, 1986, abandoned.

[31] Int. Cl. 4 A24D 1/00; A24F 1/00

[52] U.S. Cl. 131/271; 131/273;
546/281

[58] Field of Search 131/270-271,
131/272, 273, 335; 546/281; 514/343

[56] References Cited

U.S. PATENT DOCUMENTS

1,776,862 9/1930 Lindstaedt

2,139,839 12/1938 McKinney

3,109,436 11/1963 Bavley et al.

3,280,823 10/1966 Bavley et al.

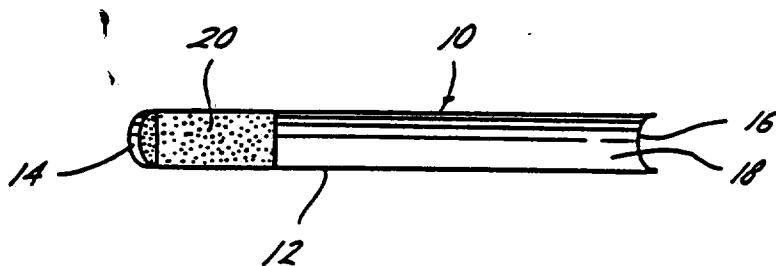
4,340,072 7/1982 Bolt et al.

Primary Examiner—V. Millin
Attorney, Agent, or Firm—Arnold, White & Durkee

[57] ABSTRACT

Compositions comprising nicotine and a volatile nicotine-miscible substance may be used to create sources of modulated nicotine vapor. The modulation of nicotine vapor may be one of quantity or of perceived physiological impact or a combination of both. The substance should have a volatility somewhat similar to that of nicotine and have a normal boiling point between about 175° C. and about 275° C. These compositions may be placed in the nicotine reservoir of a personal oral nicotine inhaler. Esters are preferred nicotine miscible substances, particularly when substantially flavorless and generally recognized as safe for human consumption. Nicotine and nicotine-miscible substance in a weight/weight ratio between about 0.5 and 40.0 are emplaced in a nicotine reservoir, for example absorbed in a porous polyethylene item, for insertion into the tubular passageway of a smokeless cigarette.

11 Claims, 2 Drawing Sheets



RECEIVED
PHILIP MORRIS MANAGEMENT CORP.
LAW DEPT—PATENT SECTION

APR 26 1990

Cliff
NOTED 1st Sander
J. Charles

2021391963